

ABSTRACT

The present invention provides a rubber kneading machine that obviates the need for an operator to touch rubber on a rotating roll surface to perform a rubber kneading operation, permits an unattended operation, is intrinsically safe, permits improved productivity of a rubber kneading process, secure stable quality of kneaded rubber, and allows a closed rubber supplying mechanism to be easily opened and exposed for easy cleaning. The rubber kneading machine is equipped with two horizontal rolls 1 and 2 closely disposed vertically, decelerators 16a and 16b and variable speed motors 15a and 15b for rotating the rolls at different speeds, and a screw extruder 3 for supplying a rubber lump fed into a hopper 4 at a proximal end to the rolls. A rubber circulating mechanism is constructed mainly of a scraper 33 and a belt conveyor 34, or a belt conveyor 35 above the upper roll 1 to feed a rubber sheet, which has left the rolls 1 and 2, to the hopper 4. Furthermore, a mechanism for releasing the screw extruder 3 is provided to make it possible to open and expose closed portions to facilitate cleaning.